

IN THE CLAIMS

Please cancel claim 9, and further amend the claims so that they read as presented below.

1. (currently amended) A method for supporting versioning of data in a content management system, said method comprising the steps of:

~~associating version numbers, each having a different value, with a data item, wherein said data item is externally inputted data that is managed by said content management system;~~
~~maintaining a first table for storing an identifier of a most recent version of said a data item in a first table; and~~
~~maintaining a second table for storing a an identifier of an older version of said data item-other than said most recent version in a second table; and,~~
~~performing an operation on said data item that changes a version of said data item in said first table or said second table~~
wherein, when said data item is to be updated, (i) said second table is updated to include said identifier of said most recent version of said data from said first table, and (ii) said first table is updated to identify a new version of said data item.

2. (currently amended) The method of claim 1, further comprising the step of associating said different version numbers with different versions of said data item.

3. (previously presented) The method of claim 2, wherein each of said different versions is associated with a (version number – 1) value.

4. (previously presented) The method of claim 3, wherein a particular version of said data item is determined based on an associated one of said (version number – 1) values.

5. (currently amended) The method of claim 3, further comprising ~~the step of generating a value for generating said (version number -1) value for successive versions of said data item by incrementing said (version number – 1) value from zero (0) to n.~~

6. (currently amended) The method of claim ~~1_2~~, further comprising ~~the step of generating a value for said version number successive versions of said data item by incrementing said version number from zero (0) to m.~~

7. (original) The method of claim 6, wherein m has a predetermined maximum value.

8. (currently amended) The method of claim 1, wherein ~~said_a~~ version number having a value of zero (0) is associated with said most recent version of ~~said_stored~~ data item or an oldest version of ~~said stored~~ data item, depending on a context of use for said version number.

9. (canceled)

10. (currently amended) The method of claim 1, wherein ~~said_an~~ operation including ~~said_a~~ version number having a value of zero (0) is interpreted as a request for said most recent version of ~~said stored~~ data item, and said operation is selected from a group consisting of a query operation, a retrieve operation, and an update operation.

11. (currently amended) The method of claim 1, wherein ~~said_an~~ operation including ~~said_a~~ version number having a value of zero (0) is interpreted as a request for an oldest version of ~~said stored~~ data item, and said operation is a delete operation.

12. (currently amended) The method of claim 1, ~~wherein said step of performing comprises a step of further comprising~~ performing a query for ~~a version of said data item stored in said first table or said second table. said identifier of said most recent version or said identifier of said older version.~~

13. (original) The method of claim 1, wherein a first instance of a version of said data item is stored in said first table.

14. (currently amended) The method of claim 1, ~~wherein said step of performing comprises a step of further comprising~~ performing a query on said first table and said second table, wherein a column attribute of a column selected by said query is retained in a result of said query.

15. (original) The method of claim 14, wherein said query invokes a union operation.

16. (previously presented) The method of claim 14, wherein said column attribute is obtained from a sequential query language description area (SQLDA) of said query result.

17. (currently amended) A system for supporting versioning of data in a content management system, said system comprising:

a memory;

~~means for associating version numbers, each having a different value, with a data item, wherein said data item is externally inputted data that is managed by said content management system;~~

~~a module that maintains (a) a first table means for storing an identifier of a most recent version of said a data item in said memory, and a second table for storing a (b) a second table for storing an identifier of an older version of said data item other than said most recent version in said memory; and,~~

~~means for performing an operation on said data item that changes a version of said data item in said memory or said second table~~

~~wherein, when said data item is to be updated, (i) said second table is updated to include said identifier of said most recent version of said data from said first table, and (ii) said first table is updated to identify a new version of said data item.~~

18. (currently amended) The system of claim 17, ~~comprising means for associating said further comprising a module that associates different~~ version numbers with different versions of said data item.

19. (previously presented) The system of claim 18, wherein each of said different versions is associated with a (version number – 1) value.

20. (previously presented) The system of claim 19, wherein a particular version of said data item is determined based on an associated one of said (version number – 1) values.

21. (currently amended) The system of claim 19, ~~comprising means for generating further comprising a module that generates said (version number -1) value for successive versions of said data item by incrementing said (version number – 1) value from zero (0) to n.~~

22. (currently amended) The system of claim 17, ~~comprising means for generating 18, further comprising a module that generates a value for successive versions of said data item-said version number~~ by incrementing said version number from zero (0) to m.

23. (original) The system of claim 22, wherein m has a predetermined maximum value.

24. (currently amended) The system of claim 17, wherein ~~said a~~ version number having a value of zero (0) is associated with said most recent version of said ~~stored~~ data item or an oldest version of said ~~stored~~ data item, depending on a context of use for said version number.

25. (currently amended) The system of claim 17, wherein ~~said an~~ operation including ~~said a~~ version number having a value of zero (0) input to said system is interpreted as a request for said most recent version of said stored data item, and said operation is selected from a group consisting of a query operation, a retrieve operation, and an update operation.

26. (currently amended) The system of claim 17, wherein said an operation including said a version number having a value of zero (0) input to said system is interpreted as a request for an oldest version of said stored data item, and said operation is a delete operation.

27. (currently amended) The system of claim 17, wherein a first instance of a version of said data item is stored in-a said first table.

28. (previously presented) The system of claim 27, wherein a column attribute of a column selected by a query performed on said first table and said second table is retained in a result of said query.

29. (original) The system of claim 28, wherein said query invokes a union operation.

30. (previously presented) The system of claim 28, wherein said column attribute is obtained from a sequential query language description area (SQLDA) of said query result.

31. (currently amended) A storage medium having computer readable program instructions embodied therein for supporting versioning of data in a content management system, said storage medium comprising:
~~program instructions for associating version numbers, each having a different value, with a data item, wherein said data item is externally inputted data that is managed by said content management system;~~
~~program instructions for maintaining a first table for storing an identifier of a most recent version of said a data item in a first table;~~
~~program instructions for maintaining a second table for storing a an identifier of an older version of said data item other than said most recent version in a second table; and~~
~~program instructions for performing an operation on said data item that changes a version of said data item in said first table or said second table, wherein, when said data item is to be updated, (i) said second table is updated to include said identifier of said most recent~~

version of said data from said first table, and (ii) said first table is updated to identify a new version of said data item.

32. (currently amended) The storage medium of claim 31, further comprising program instructions for associating said different version numbers with different versions of said data item.

33. (previously presented) The storage medium of claim 32, comprising program instructions for associating each of said different versions with a (version number – 1) value.

34. (previously presented) The storage medium of claim 33, wherein a particular version of said data item is determined based on an associated one of said (version number – 1) values.

35. (currently amended) The storage medium of claim 33, comprising program instructions for generating a value for said (version number -1) value for successive versions of said data item by incrementing said (version number – 1) value from zero (0) to n.

36. (currently amended) The storage medium of claim 31_32, comprising program instructions for generating a value for said version number successive versions of said data item by incrementing said version number from zero (0) to m.

37. (original) The storage medium of claim 36, wherein m has a predetermined maximum value.

38. (currently amended) The storage medium of claim 31, comprising program instructions for interpreting said version number, having a value of zero (0), associating a version number having a value of zero (0) with said most recent version of said stored data item or an oldest version of said stored data item, depending on a context of use for said version number.

39. (currently amended) The storage medium of claim 31, comprising program instructions for interpreting said an operation including said version number, having a value of zero (0), a version

| number having a value of zero (0) as a request for said most recent version of said stored data item, wherein said operation is selected from a group consisting of a query operation, a retrieve operation, and an update operation.

| 40. (currently amended) The storage medium of claim 31, comprising program instructions for interpreting said an operation including said a version number having a value of zero (0) as a request for an oldest version of said stored data item, and said operation is a delete operation.

41. (original) The storage medium of claim 31, comprising program instructions for retaining a column attribute of a column selected by a query performed on said first table and said second table.

42. (original) The storage medium of claim 41, wherein said query invokes a union operation.

43. (previously presented) The method of claim 41, wherein said column attribute is obtained from a sequential query language description area (SQLDA) of said query result.